BTEC Sport Unit 1: Fitness for Sport and Exercise Exam Revision List

Topic A.1: Components of Physical Fitness

- Aerobic Endurance
- Muscular Endurance
- Flexibility
- Speed
- Muscular Strength
- Body Composition

Topic A.2: Components of Skill-Related Fitness

- Agility
- Balance
- Coordination
- Power
- Reaction Time

Topic A.3: Why Fitness Components are Important for Successful Participation in Given Sports

- Link components with the physical and skill-related demands of a range of sports, in order to reach optimal performance
- Link relevant components of physical/skill-related fitness to specific events/positions played

Topic A.4: Exercise Intensity and How it Can be Determined

- Intensity − be able to measure heart rate (HR) and apply HR intensity to fitness training methods.

- Know about target zones and training thresholds; be able to calculate training zones and apply HR max to training: HR max = 220 – age (years).

- Be able to calculate 60–85% HR max and know that this is the recommended training zone for cardiovascular health and fitness

- Know that the Borg Rating of Perceived Exertion (RPE) Scale can be used as a measure of exercise intensity
- Know about the relationship between RPE and heart rate. RPE x 10 = HR (bpm)

- Application of the FITT principles to training methods, regimes and given exercise situations

Topic A.5: The Basic Principles of Training (FITT)

- Frequency
- Intensity
- Time
- Type

Topic A.6: Additional Principles of Training

- Progressive overload
- Specificity
- Individual differences/needs
- Adaptation
- Reversibility
- Variation
- Rest and recovery
- Application of the principles of training to training methods, regimes and given exercise settings

Topic B.1: Warm-Up and Cool-Down

- Why we need to warm up and cool down
- Phases of a warm up/cool down and what they should include

Topic B.2-3: Fitness Training Methods and their Requirements

- Flexibility Training: Static, Ballistic, Proprioceptive Neuromuscular Facilitation (PNF) technique

- Strength, Muscular Endurance and Power Training: Circuit training, Free weights, Plyometrics

- Aerobic Endurance Training: Continuous training: Fartlek training, Interval training, Circuit training

- Speed Training: Hollow sprints, Acceleration sprints, Interval training

- The importance of safe and correct use of equipment and technique
- Application of the basic FITT principles of training for each method
- Linking each fitness training method to the associated health-related/skill-related component of fitness.

Additional requirements for each of the fitness training methods:

- Advantages/disadvantages of each
- Application of exercise intensity to fitness training methods
- Application of principles of training to fitness training methods
- Appropriate application of fitness training method(s) for given situation/athletes
- Appropriate application of fitness training method(s) to given client needs/goals/aims/objectives.

Topic C.1: Fitness Test Methods for Components of Fitness

- Flexibility: sit and reach test
- Strength: grip dynamometer
- Aerobic endurance: Multi-stage fitness test (bleep test), Forestry step test
- Speed: 35m sprint
- Speed and agility: Illinois agility run test
- Power: vertical jump test
- Muscular endurance: one-minute press-up test, one-minute sit-up test
- Body composition: Body Mass Index (BMI), Bioelectrical Impedance Analysis (BIA), Skinfold testing (the Jackson-Pollock nomogram method)

Topic C.2: Importance of Fitness Testing to Sports Performers and Coaches

- How baseline data helps the monitoring/improving of performance
- How training programmes can be designed based on test results and we can see if training programmes are working
- Results can give a performer something to aim for/goal setting

Topic C.3: Requirements for Administration of Fitness Tests

- Pre-test procedures (informed consent, calibration of equipment)
- Knowledge of published standard test methods and equipment/ resources required
- Know the purpose of each fitness test
- Accurate measurement and recording of test results
- Basic processing of test results for interpretation (using published data tables and appropriate units for comparison purposes)
- Ability to safely select appropriate test(s) for given purposes, situations and/or participants
- Know the definitions for the terms ‘reliability’, ‘validity’ and ‘practicality’ related to each fitness test method
- Advantages and disadvantages of fitness test methods.

Topic C.4: Interpretation of fitness test results:

- Compare fitness test results to normative published data
- Be able to draw conclusions from data results
- Be able to analyse and evaluate test results
- Be able to suggest and justify appropriate recommendations for improvements to fitness for a given purpose/situation/participant
- Be able to suggest and justify appropriate fitness training methods